

Appl. S.N.: 10/065,894  
Amdt. Dated February 21, 2007  
Reply to Advisory Action of January 31, 2007

128885-1

#### REMARKS/ARGUMENTS

This amendment is responsive to the Advisory Action dated January 31, 2007 wherein claims 1, 3-8, 12, 14-18, 22 and 24 remained rejected under 35 U.S.C. §103(a) and claims 9-11 and 19-21 remained objected to as being dependent upon a rejected base claim, but would allowable if rewritten into independent form including all the base claims and any intervening claims. Further, the proposed amendments filed in the Office Action dated January 12, 2007 were not entered because they raised new issues that would require further consideration and/or search, and because the amendments were not in compliance with 37 C.F.R. §1.121(c).

Applicants are hereby filing a Request for Continued Examination (RCE) Transmittal concurrently with this Amendment, because the deletion of the previously claimed feature of "free boundary models" from independent claims 1, 12 and 22 requires further consideration and/or search. Applicants respectfully submit that, in light of the arguments made below and in the Office Action dated January 12, 2007, the application should be placed in condition for allowance.

With regards to the non-compliant amendments of claims 2, 13, and 23, Applicants have canceled claims 2, 13, and 23 and added new claims 25, 26 and 27. Applicants respectfully submit that the claims, as amended, now comply with 37 C.F.R. §1.121(c). No new matter has been added.

In the Office Action dated November 27, 2006, claims 1, 3-8, 12, 14-18, 22 and 24 were rejected under 35 U.S.C. §103(a) as being unpatentable over Gray (US 5,579,766) in view of Applicant's Admitted Prior Art (AAPA). Claims 9-11 and 19-21 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1, 3, 5-7, 10-12, 14-18, 20-22, and 24-27 remain pending in this application. Reconsideration in light of the above amendments and the following remarks is respectfully requested.

Applicants respectfully traverse the rejection of independent claims 1 and 12 and dependent claims 3-8, 14-18, and 24 under 35 USC §103(a) as being unpatentable over Gray in view of Applicants Admitted Prior Art (AAPA). Applicants respectfully disagree with Examiners characterization of Applicants specification at pages 8 and 10 as "prior art." Applicant has amended independent claims 1 and 12 to incorporate the allowable features of claims 9 and 19 respectively, including all the limitations of any base or intervening claim, as per Examiners

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suggestion in statement number 9 in the Office Action dated November 27, 2006. Therefore the rejections of claims 1 and 12 have been obviated. Furthermore, dependent claims 4 and 8 were also canceled, so therefore the rejection of those claims has also been obviated. Dependent claims 5-7, 14-18 and 20-21 recite further inventive features based on the subject matter of amended independent claims 1 and 12 respectively, and are therefore allowable by dependency. Applicants respectfully request that the rejection under 35 USC §103(a) be withdrawn.

With regards to the objection of claims 9-11 and 19-21 as being allowable, but objected to as being dependent upon rejected base claims, claims 9 and 19 were canceled and their subject matter incorporated into claims 1 and 12 by amendment respectively, as per Examiners suggestion. Therefore Applicants respectfully submit that claims 10, 11, 20 and 21 are allowable by dependency.

Newly added dependent claims 25 and 28 recite further inventive features based on the subject matter independent claims 1 and 12 respectively. Given Applicants have amended claims 1 and 12 to be allowable, Applicants respectfully request these claims be entered as an amendment and submit that they are allowable by dependency.

Applicants respectfully traverse the rejection of Independent claim 22 under 35 USC §103(a) as being unpatentable over Gray (US 5,579,766) and view of Applicants Specification. Claim 22 has been amended to more clearly recite Applicants Invention. As amended, claim 22 recites a method for at least one of diagnosing, quantifying and predicting emphysema from acquired medical image data comprising applying at least one segmentation to the acquired medical image data to generate a plurality of segmented regions of interest, extracting features relevant for emphysema from the segmented regions to generate extracted features, mathematically modelling the features for use in one of diagnosing, quantifying and predicting changes indicative of the emphysema, ~~wherein the mathematically modeling step comprises using free boundary models, analyzing the extracted features to assess severity and progression of the given disease, and generating output of the level and progression of the disease wherein the output comprises highlighted regions corresponding to values of the extraction step~~ (underlined text added as an amendment). Nowhere does Gray teach or suggest the amended analyzing step or the amended generating output step in the present invention. Therefore, Applicants respectfully request that the rejection under 35 USC §103 (a) be withdrawn.

Newly added dependent claim 27, recites further inventive features based on the subject matter of claim 22. Given Applicants have amended claim 22 to be allowable, Applicants

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respectfully request claim 27 be entered by amendment and submit that dependent claim 27 is allowable by dependency.

Applicants respectfully traverse the rejection of dependent claim 24 under 35 USC §103(a) as being unpatentable over Gray (US 5,579,766) and in view of Applicants Specification. Claim 24 recites further inventive features based on the subject matter of independent claim 22, and therefore Applicants submit that claim 24 is allowable by dependency, based on the deficiencies of the Gray reference with regards to independent claim 22. Applicants respectfully submit that the rejection under 35 USC §103(a) be withdrawn.

In view of the foregoing amendments and for the reasons set out above, Applicants respectfully submit that the application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are respectfully requested.

Should the Examiner believe that anything further is needed to place the application in condition for allowance, the Examiner is requested to contact Applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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